

ABSTRACT OF THE DISCLOSURE

Transistors having large gate tunnel barriers are used as transistors to be on in a standby state, MIS transistors having thin gate insulating films are used as transistors to be off in the standby state, and
5 main and sub-power supply lines and main and sub-ground lines forming a hierarchical power supply structure are isolated from each other in the standby state so that a gate tunnel current is reduced in the standby state in which a low power consumption is required. In general, a gate
tunnel current reducing mechanism is provided for any circuitry
10 operating in a standby state and an active state, and is activated in the standby state to reduce the gate tunnel current in the circuitry in the standby state, to reduce power consumption in the standby state.